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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/134,897	08/17/1998	TOMOHARU TANAKA	0039-6348-2S	8591

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EXAMINER

TRAN, ANDREW Q

ART UNIT PAPER NUMBER

2824

DATE MAILED: 04/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/134,897

Applicant(s)

TANAKA ET AL.

Examiner

Andrew Q. Tran

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-129, 133-135, 139, 140, 143 and 150-174 is/are pending in the application.
- 4a) Of the above claim(s) 120-129, 133-135, 139, 140, 143 and 150-174 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-119 is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-129, 133-135, 139, 140, 143 and 150-174 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☒ Certified copies of the priority documents have been received in Application No. 08/308,534.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

This communication is supplemental to Quayle Action of October 04, 2005, and further in response to Applicant's request of December 05, 2005 for items (1) and (4) as per MPEP § 1450 as reproduced below :

Where a restriction requirement is made by the examiner, the original patent claims will be held to be constructively elected (except for the limited situation where a disclaimer is filed as discussed in the next paragraph). Thus, the examiner will issue an Office action in the reissue application

- (1) providing notification of the restriction requirement,
- (2) holding the added claims to be constructively non-elected and withdrawn from consideration,
- (3) treating the original patent claims on the merits, and
- (4) informing applicant that if the original claims are found allowable, and a divisional application has been filed for the non-elected claims, further action in the application will be suspended, pending resolution of the divisional application.

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-119, drawn to a multi-level nonvolatile semiconductor memory device having a plurality of program control circuits (or a plurality of data circuits), classified in class 365, subclass 185.22.
- II. Claim 120, drawn to a multi-level nonvolatile semiconductor memory device having a program circuit, classified in class 365, subclass 185.17.
- III. Claims 121-128, drawn to a multi-level nonvolatile semiconductor memory device having a plurality of data latch circuits, classified in class 365, subclass 185.21.

- IV. Claim 129, drawn to a multi-level nonvolatile semiconductor memory device having a data latch circuit coupled to a first and second bitline bias circuit, classified in class 365, subclass 185.25.
- V. Claims 133-135, drawn to a multi-level nonvolatile semiconductor memory device having a read circuit, classified in class 365, subclass 185.18.
- VI. Claims 139-140, drawn to a multi-level nonvolatile semiconductor memory device having a verify circuit, classified in class 365, subclass 185.01.
- VII. Claim 143, drawn to a multi-level nonvolatile semiconductor memory device having a wordline selector and a bitline precharge circuit, classified in class 365, subclass 185.23.
- VIII. Claim 150, drawn to a multi-level nonvolatile semiconductor memory device having a verify circuit for performing recited functions, classified in class 365, subclass 233.
- IX. Claims 151-157, drawn to a multi-level nonvolatile semiconductor memory device having a plurality of program control circuits for carrying out the functions recited, classified in class 365, subclass 185.03.
- X. Claims 158-162 and 170-174, drawn to a multi-level nonvolatile semiconductor memory device having a plurality of program control circuits storing a first and second data in a respective first and second data storage portion, classified in class 365, subclass 185.24.
- XI. Claims 163-169, drawn to a multi-level nonvolatile semiconductor memory device having a plurality of program control circuits which determine only whether corresponding memory cells have reached second and third storage levels, classified in class 365, subclass 168.

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The inventions are distinct, each from the other because of the following reasons:

Inventions of Groups I to XI are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct if they do not overlap in scope and are not obvious variants, and if it is shown that at least one subcombination is separately usable. In the instant case, each of the inventions of Group I to XI has separate utility, by itself. For example, the Group III invention has a separate utility, such as a multi-level nonvolatile semiconductor memory device having a plurality of data latch circuits, as claimed. See MPEP § 806.05(d).

Because these inventions are independent or distinct for the reasons given above and have acquired a separate status in the art in view of their different classification, restriction for examination purposes as indicated is proper.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103(a) of the other invention.

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Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Furthermore, Applicant is informed that if the original claims are found allowable, and a divisional application has been filed for the non-elected claims, further action in the application will be suspended, pending resolution of the divisional application, according to item (4) of MPEP § 1450.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Q. Tran whose telephone number is (571) 272-1885. The examiner can normally be reached on Mon - Fri 8:30 AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard T. Elms can be reached on (571) 272-1869. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Andrew Q Tran
Primary Examiner
Art Unit 2824

at
April 16, 2006